members of which have either the second or the third pinnule (or both) distinctly larger than the first one. In a few species like *Antedon elongata* and *Antedon flagellata* the third pinnule is the largest, as in the ten-armed *Antedon variipinna* (Pl. XXXVI. figs. 1, 4–6). In others, again, like *Antedon articulata* and *Antedon regalis*, the second and third pinnules are of about equal size, as in the ten-armed *Antedon parvicirra* (Pl. XXXVI. fig. 8). But in *Antedon palmata*, and in the majority of the species composing the group, the second pinnule is considerably larger than both the first and the third (Pl. XLVIII. fig. 2; Pl. XLIX. fig. 4), just as in *Antedon pinniformis* of the *Milberti*-group. The parallel between the two groups may be continued yet further; for the singular *Antedon informis*, which is without a pinnule on the third brachial (Pl. XXXIII. fig. 3) has two representatives in the *Palmata*-group, viz., *Antedon disciformis* (Pl. XXXIX. fig. 4), and *Antedon manca* (Pl. XLIV. figs. 2, 3). The first of these has no axillary beyond the distichals, but palmars are present in *Antedon manca* as in most species of the group; and there are usually six arms to each ray, of which only the two outermost usually have pinnules on the second brachials.

Besides *Antedon disciformis*, *Antedon clemens* and *Antedon marginata* (Pl. XXXIX. fig. 5; Pl. XL. fig. 1) are the only members of the group which have but one post-radial axillary. Some forms, like *Antedon articulata*, *Antedon palmata*, and *Antedon conjungens* (Pl. XLV. fig. 1), always have two and occasionally three; while we are not yet acquainted with examples of *Antedon flagellata*, *Antedon gyges*, and *Antedon occulta* (Pl. XLVIII. fig. 1; Pl. XLIX. fig. 3) in which a post-palmar axillary does not occur on one or more of the rays. I have no doubt, however, that simpler forms of these species will eventually be found, and I have, therefore, made no use of the presence or absence of a post-palmar axillary for the purpose of classification.

With the exception of the three species (*Antedon occulta*, *Antedon similis*, and *Antedon tuberculata*), which were dredged by the Challenger at one of the three Stations 174B, C, or D (255, 610 or 210 fathoms), all the members of the *Palmata*-group belong to the littoral fauna; and they are exclusively limited to the Western Pacific and the Indian Ocean. They are extremely abundant between the Friendly Islands on the east, and the Mergui Archipelago on the west, ranging northwards as far as Southern Japan, but not extending to the south beyond the tropic of Capricorn. Isolated species occur at the Sandwich Islands on the east and also at Ceylon and Rodriguez on the west; while *Antedon palmata*, the type of the group, is common at Aden and in the Red Sea. This is the furthest western limit of the group, which is altogether unrepresented in the Atlantic; for all the bidistichate species of *Antedon* from the Caribbean Sea have plated ambulacra, and therefore belong to the *Spinifera*-group.

The mutual relations of the various species composing the *Palmata*-group are shown in the following key:—